

MTH 621/Peszynska/Fall 2011, Assignment 2

Please show all your work. Use proper mathematical notation.

1. Solve $u_t + u_x + u_y = 0$ with the initial condition $u(x, y, 0) = g(x, y)$ where g is a smooth function.
2. Solve problems 2-6.4ab from textbook.
3. Solve 2-6.5b from the book.